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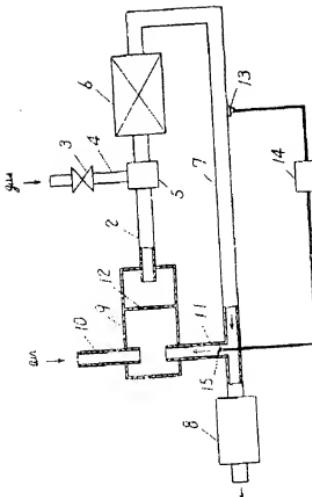
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APPLICANT : MATSUSHITA ELECTRIC IND CO LTD;

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TITLE : MUFFLER FOR ENGINE



**ABSTRACT :** PURPOSE: To effectively reduce a sound pressure level of a lower frequency component by arranging a sound insulating chamber in an air intake system dividing the interior of the sound insulating chamber with a partition plate, communicating one of the aforesaid divided spaces with an air intake passage, and allowing an air intake pipe and an exhaust gas pipe to penetrate the other space described above so as to face to each other.

**CONSTITUTION:** A sound insulating chamber 9 is disposed in an air intake system of an engine 6 comprising an intake air passage 2, a gas governor 3, a gas flow passage 4, and a mixing device 5. The interior of the sound insulating chamber 9 is divided by a partition plate 12, and one of the divided spaces is communicated with an intake air passage 2, while the other of the aforesaid divided spaces is penetrated by pipe 10 and an exhaust gas pipe 11, the tips of which are allowed to face to each other. The exhaust gas pipe 11 is allowed to branch off from the exhaust gas flow passage 7, and an O<sub>2</sub> sensor 13 is provided in the exhaust gas flow passage 7. The degree of opening of an EGR valve 15 is made adjustable via a controller 14. Hereby, a sound wave from the air intake pipe 10 and a sound wave from the exhaust gas pipe 11 are forced to collide with each other in the sound insulating chamber 9 and their phases are cancelled out with each other for reducing the sound.

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